

COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No. 2000 1328

JUL 1 4 2004

Mitsuaki OSHIMA et al.

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OFFICE OF PETITIONS

Serial No. 09/672,946

Group Art Unit 2634

Filed September 29, 2000

Examiner A. Le

**COMMUNICATION SYSTEM** 

Confirmation No. 7022

## **AMENDMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 RESPONSE UNDER 37. CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3634

Sir:

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In response to the Office Action mailed May 5, 2004, please amend the application as follows.

## IN THE CLAIMS:

Please cancel claims 40-48 and add new claims 49-57 as follows.

49. A signal transmission and receiving system comprising a transmission apparatus and a receiving apparatus,

said transmission apparatus comprising:

- a mapper operable to map a first data stream to a 2-level mapped signal having two levels separated by a first amount, and to map a second data stream to an 8-level mapped signal having eight levels, each adjacent two levels of which are separated by a second amount that is less than the first amount;